

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (previously presented) An organic electroluminescence device comprising:
a semiconductor substrate, at least part of the semiconductor substrate forming a Peltier element including a heat absorbing portion and a heat radiating portion; and
an organic electroluminescence element arranged on or above the semiconductor substrate, wherein the organic electroluminescence element is arranged so that heat resistance between the organic electroluminescence element and the heat absorbing portion is less than heat resistance between the organic electroluminescence element and the heat radiating portion, and light emitted from the organic electroluminescence element exits from a side facing away from the semiconductor substrate,
wherein the Peltier element includes a heat absorbing electrode formed at the heat absorbing portion and a heat radiating electrode formed at the heat radiating portion, and the heat absorbing electrode of the Peltier element also serves as an electrode of the organic electroluminescence element or is directly connected to an electrode of the organic electroluminescence element.
2. (Original) The organic electroluminescence device according to claim 1, wherein the semiconductor substrate entirely forms the Peltier element with the heat absorbing portion formed at one side of the Peltier element, and the organic electroluminescence element is arranged on the semiconductor substrate at the same side as the heat absorbing portion.

3. (Canceled)

4. (previously presented) The organic electroluminescence device according to claim 1, wherein the organic electroluminescence element includes an organic electroluminescence layer and two electrodes sandwiching the organic electroluminescence layer, with one of the two electrodes serving as the heat absorbing electrode.

5. (previously presented) The organic electroluminescence device according to claim 1, wherein the organic electroluminescence element includes an organic electroluminescence layer and two electrodes sandwiching the organic electroluminescence layer, with one of the two electrodes being arranged on the heat absorbing electrode.

6. (previously presented) The organic electroluminescence device according to claim 1, wherein the heat absorbing electrode and the electrode of the organic electroluminescence element are both supplied with voltage from a common power source.

7. (Canceled)

8. (previously presented) The organic electroluminescence device according to claim 1, wherein the organic electroluminescence element includes:
an organic electroluminescence layer; and

a cathode and an anode sandwiching the organic electroluminescence layer, with voltage being applied between the cathode and the anode to emit light from the organic electroluminescence layer.

9. (Original) The organic electroluminescence device according to claim 1, further comprising a plurality of organic electroluminescence elements, wherein said organic electroluminescence element is one of the plurality of organic electroluminescence elements, with the organic electroluminescence elements being configured so that each organic electroluminescence element emits light independently from the other organic electroluminescence elements.

10. (Original) A liquid crystal display comprising:
the organic electroluminescence device according to claim 1; and
a liquid crystal panel, wherein the organic electroluminescence device functions as a backlight for the liquid crystal panel.

11. (previously presented) An organic electroluminescence device comprising:
a substrate;
a semiconductor region formed on the substrate;
Peltier elements and active driving elements formed in the semiconductor region, each Peltier element including a heat absorbing electrode and a heat radiating electrode; and
organic electroluminescence elements each arranged on or above one of the heat absorbing electrodes and electrically connected to one of the active driving elements, wherein

light emitted from the organic electroluminescence element exits from a side facing away from the substrate.

12. (previously presented) The organic electroluminescence device according to claim 11, wherein each organic electroluminescence element is arranged on an insulating layer formed on the heat absorbing electrode, the insulating layer having high thermal conductivity.

13. (Original) The organic electroluminescence device according to claim 12, wherein the thermal conductivity of the insulating layer is greater than that of the substrate.

14. (Original) The organic electroluminescence device according to claim 11, wherein the substrate is transparent and insulative.

15. (Original) The organic electroluminescence device according to claim 11, wherein the substrate is made of metal.

16. (previously presented) The organic electroluminescence device according to claim 11, wherein each of the organic electroluminescence elements is driven by the corresponding active driving element so that each organic electroluminescence element emits light independently from the other organic electroluminescence elements.

17. (Original) A liquid crystal display comprising:
the organic electroluminescence device according to claim 11; and

a liquid crystal panel, wherein the organic electroluminescence device functions as a backlight for the liquid crystal panel.

18. (Previously presented) An organic electroluminescence device comprising:

a substrate including a semiconductor region:

a Peltier element formed in at least part of the semiconductor region, the Peltier element including a heat absorbing portion and a heat radiating portion; and

an organic electroluminescence element arranged on or above the substrate, wherein the organic electroluminescence element is arranged so that heat resistance between the organic electroluminescence element and the heat absorbing portion is less than heat resistance between the organic electroluminescence element and the heat radiating portion, and light emitted from the organic electroluminescence element exits from the substrate,

wherein the Peltier element includes a heat absorbing electrode formed at the heat absorbing portion and a heat radiating electrode formed at the heat radiating portion, and the heat absorbing electrode of the Peltier element also serves as an electrode of the organic electroluminescence element or is directly connected to an electrode of the organic electroluminescence element.

19. (Original) The organic electroluminescence device according to claim 18, wherein the substrate is transparent and insulative.

20. (Original) The organic electroluminescence device according to claim 18, further comprising a plurality of organic electroluminescence elements, wherein said organic

electroluminescence element is one of the plurality of organic electroluminescence elements, the organic electroluminescence elements being configured so that each organic electroluminescence element emits light independently from the other organic electroluminescence elements.

21. (Original) A liquid crystal display comprising:
the organic electroluminescence device according to claim 18; and
a liquid crystal panel, wherein the organic electroluminescence device functions as a
backlight for the liquid crystal panel.

22.-28 (Canceled)